

CLAIMS:

1. A trigger for mounting in a trigger frame, the trigger comprising:

a body portion;

5 a pivot connection means on the body portion for connecting the trigger to the trigger frame so that the trigger is pivotable about the pivot connection means in the trigger frame;

a lever extending from the body portion for contact by a user to move the trigger rotatably about the pivot connection means;

10 an engagement portion associated with the body portion for engaging a firing mechanism to initiate discharge;

a rod connection means associated with the body portion for connecting the trigger to a rod to initiate cocking.

15 2. A trigger as claimed in claim 1 wherein the body portion comprises a central portion, the central portion having the pivot connection means located thereon, a head portion, the head portion having the rod connection means located thereon, and a ramp means on the engagement portion, the ramp means providing a surface for 20 engaging a sear.

3. A trigger as claimed in claim 1 wherein the pivot connection means comprises an aperture extending through the body portion.

25 4. A trigger as claimed in claim 1 wherein the rod connection

means comprises an aperture in the body portion.

5. A trigger as claimed in claim 2 wherein the head portion and the engagement portion each have abutment surfaces for abutting the trigger frame to limit the extent of movement of the trigger within the trigger frame.

6. A trigger as claimed in claim 1 wherein the pivot connection means and the rod connection means are substantially vertically aligned with each other when the trigger is mounted in the trigger frame.

7. A trigger as claimed in claim 1 wherein the pivot connection means and the rod connection means are approximately 0.625 inches apart.

8. A trigger as claimed in claim 1 wherein the lever is an elongate, flat arm of sufficient length so that at least two fingers of the user can be wrapped around the arm.

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9. A trigger as claimed in claim 1 wherein the distance between the pivot connection means and the rod connection means is configured so as to initiate a predetermined timing sequence for initiating firing and re-arming respectively.

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10. A trigger as claimed in claim 1 wherein the distance between the pivot connection means and the engagement portion is configured so that the firing mechanism will be initiated when the trigger has been pulled a predetermined distance.

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11. A trigger frame for receiving a pivotally mounted trigger therein, the trigger frame comprising:

a body having a cavity therein for receiving at least a portion of the trigger;

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a handle connected to the body;

a trigger guard on the body, the trigger guard and body defining a space with which a portion of the cavity is in communication;

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a connection member on the body for securing a trigger in the cavity and space so that the trigger is pivotally movable;

a slot member on the body to provide access from the outside of the trigger frame to a rod connection means on the trigger;

abutment surfaces within the cavity to limit the range of movement of the trigger when located in the body.

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12. A trigger frame as claimed in claim 11 wherein the connection member comprises apertures and a pivot pin by means of which the trigger is pivotally connected to the body, a portion of the trigger being located in the cavity and another portion of the trigger extending from the cavity into the space defined by the

trigger guard.

13. A trigger frame as claimed in claim 11 wherein the slot member  
is an elongate horizontal slot positioned substantially over, and  
5 in a vertical plane with, the connection member.

14. A trigger frame as claimed in claim 13 wherein the horizontal  
slot is dimensioned so as to be of just sufficient length to expose  
to the outside of the body the rod connection means in all  
10 positions along its movement of travel when the trigger is pivoted  
in the body.

15. A trigger frame as claimed in claim 11 wherein the connection  
member and the slot member are in a substantially vertical plane  
15 with respect to each other.

16. A trigger frame as claimed in claim 11 wherein the connection  
member and the slot member are positioned approximately 0.625  
inches from each other.

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17. A trigger frame as claimed in claim 11 further comprising a  
sear connection member for pivotally mounting a sear within the  
cavity, the connection member for securing the trigger and the sear  
connection member being spaced from each other so that the trigger  
25 and sear are able to engage each other during firing.

18. A trigger frame as claimed in claim 11 further comprising a safety catch, the safety catch being positioned on the body and with respect to the cavity so as to releasably engage the sear.

5       19. A trigger frame as claimed in claim 18 wherein the safety catch comprises at least one aperture in the body, and a catch member movably mounted within the aperture and extending through the cavity, the catch member being movable between a lock position where it prevents movement of the sear, and an unlocked position  
10      where it permits movement of the sear.

20. A trigger assembly comprising:

      a trigger frame having a body with a cavity therein, a handle connected to the body, a trigger guard on the body defining a space  
15     with which a portion of the cavity is in communication, a connection member on the body, a slot member on the body, and abutment surfaces within the cavity;

      a trigger for mounting on the trigger frame such that a portion of the trigger is in the cavity and a portion of the  
20     trigger extends from the cavity into the space defined by the trigger guard, the trigger being pivotably mounted and movable within the trigger frame and comprising -a body portion substantially within the cavity of the body, a pivot connection means on the body portion, the pivot connection being connectable  
25     to the connection member of the body so that the trigger is

pivotal about the pivot connection in the trigger frame, a lever  
extending from the body portion for contact by a user to move the  
trigger rotatably about the pivot connection means, an engagement  
portion associated with the body portion for engaging a firing  
mechanism to initiate discharge, a rod connection means associated  
with the body portion for connecting the trigger to a rod to  
initiate re-arming, the rod connection means being aligned with the  
slot member so as to provide access from outside of the trigger  
frame to the rod connection means on the trigger, the trigger  
having stop surfaces which engage the abutment surfaces within the  
cavity to limit the range of movement of the trigger located in the  
body.

21. A trigger assembly as claimed in claim 20 wherein the body  
portion of the trigger comprises a central portion, the central  
portion having the pivot connection means located thereon, a head  
portion, the head portion having the rod connection means located  
thereon, and a ramp means on the engagement portion, the ramp means  
providing a surface for engaging a sear.

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22. A trigger assembly as claimed in claim 20 wherein the slot  
member is an elongate horizontal slot positioned substantially  
over, and in a vertical plane with, the connection member.

25 23. A trigger assembly as claimed in claim 11 wherein the

connection member and the slot member are positioned approximately 0.625 inches from each other.

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